IOWA DEPARTMENT OF NATURAL RESOURCES

ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

Sterling Woods Homeowners Association, Inc. Bettendorf, Iowa

Public Water Supply Facility No. 8209306

ADMINISTRATIVE CONSENT ORDER NO. 2012-WS-07

TO: Kevin Takacs, President Sterling Woods Homeowners Association, Inc.

6907 Nottingham Lane Bettendorf, IA 52722

I. SUMMARY

This administrative consent order (Order) is issued to the Sterling Woods Homeowners Association, Inc. (Sterling Woods). This Order is issued due to Sterling Woods' past failure to comply with the Department's requirements for correction of non-acute total coliform bacteria maximum contaminant violations (MCLs). Sterling Woods has now connected to an alternate drinking water source and is no longer a public water supply system (PWS). This Order requires Sterling Woods to pay an administrative penalty of \$3,000.00. In lieu of payment of the full administrative penalty, Sterling Woods may elect to pay an administrative penalty of \$1,500.00 and \$1,500.00 for a supplemental environmental project (SEP) as detailed in this Order.

Any questions regarding this Order should be directed to:

Relating to technical requirements:

Cecilia Naughton, Environmental Specialist Water Supply Operations Section Iowa Department of Natural Resources 401 SW 7th, Suite M Des Moines, Iowa 50309-4611 Ph: 515/725-0289

Relating to legal requirements:

Diana Hansen, Attorney at Law Legal Services Bureau Iowa Department of Natural Resources 502 E. 9th Street Des Moines, Iowa 50319-0034 Ph: 515/281-6267

Direct payment of penalty to:

Iowa Department of Natural Resources 502 East 9th Street Des Moines, Iowa 50319-0034

attor: Diana Hansen

II. JURISDICTION

This Order is issued pursuant to Iowa Code section 455B.175(1), which authorizes the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division III, Part 1, and the rules promulgated or permits issued pursuant thereto; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10 (455B), which authorize the Director to assess penalties.

III. STATEMENT OF FACTS

- 1. Sterling Woods operated a PWS located in Scott County, Iowa until its connection to Iowa American Water PWS in 2011. The Sterling Woods PWS derived its water from one well, well no. 1, which was drilled in 1988. The well had a pump rated at approximately 100 gpm flow. The Sterling Woods PWS utilized a Whitewater brand buried pitless adapter hydro pneumatic tank unit for storage and pressure. The tank was rated at 1500 gallon capacity (estimated) with a 40/60 psi control range. The facility did not utilize treatment. The PWS served 38 people through 15 service connections. As set out below, Sterling Woods is now connected to an alternate drinking water source.
- 2. On July 25, 2006, the Department's Water Supply Operations Section (WSOS) issued Sterling Woods a Notice of Violation (NOV) for a non-acute coliform bacteria maximum contaminant level (MCL) violation for July 2006. Public notification was required for the MCL violation. On September 21, 2006, this facility received an NOV for a non-acute coliform bacteria MCL violation for September 2006. Public notification was required for the MCL violation. On October 12, 2006, Sterling Woods was sent an NOV for a non-acute coliform bacteria MCL violation for October 2006. Public notification was required for the MCL violation. On November 3, 2006, this facility was issued an NOV for a monitoring violation for failure to collect coliform bacteria repeat samples in October 2006. Public notification was required for the monitoring violation.
- 3. On November 11, 2006, Daryl Enfield, an Environmental Engineer with the Department's Water Supply Engineering Section, contacted Brent Early, an Environmental Specialist with the Department's Field Office No. 6 (FO 6), by email. Mr. Enfield stated in the email that operator Joel Johnson had contacted the Department regarding the installation of a temporary chlorine feed. Mr. Enfield stated that this installation should be for no more than six weeks with the chance that the facility would need to install permanent continuous chlorination. A memo dated November 29, 2006, documented a site visit by Bob Pyle, Environmental Specialist with FO 6. Joel Johnson, the certified operator for this supply was present during the site visit. Photographs taken during the site visit indicated that a chlorinator had been installed at this facility.

- 4. On May 2, 2007, the WSOS issued a revised water supply operation permit (permit) to Sterling Woods. The permit was revised to reduce lead and copper sample frequencies to triennial monitoring.
- 5. On September 24, 2007, Sterling Woods was issued an NOV for a non-acute coliform bacteria MCL violation for October 2007. Public notification was required for the violation. On December 7, 2007, FO 6 conducted a sanitary survey at this facility. The sanitary survey report identified no deficiencies.
- 6. On August 29, 2008, Sterling Woods was issued an NOV for a non-acute coliform bacteria MCL violation for August 2008. Public notification was required for the violation. On September 24, 2008 this facility was issued an NOV for a non-acute coliform bacteria MCL violation for September 2008. Public notification was required for the violation. On October 24, 2008, this facility was issued an NOV for a non-acute coliform bacteria MCL violation for October 2008. Public notification was required for the MCL violation.
- 7. On December 8, 2008, the WSOS issued a revised permit to this facility. The permit was revised to include a compliance schedule to comply with the non-acute coliform bacteria MCLs. This appendix required the installation of continuous chlorination by February 13, 2009.
- 8. On December 18, 2008, Ms. Marlena Ehlers, a Sterling Woods representative, sent the Department a letter. The letter stated that Sterling Woods would like the Department to reconsider the requirement for continuous chlorination. The letter stated that the facility believed that the system was designed improperly and that the buried pressure tank was the source for many of their problems. The facility proposed to install an above ground tank system and install additional flush hydrants on dead ends. The letter indicated that due to the position of their pressure tank, the chlorinator and pressure tank would likely freeze.
- 9. On June 3, 2009, Bill Wyer, a WSOS environmental specialist, sent a letter to Sterling Woods. Mr. Wyer's letter outlined the steps that this facility would need to take if it no longer wanted to meet the definition of a PWS. The letter stated the facility would have to divide into two separate associations, have separate wells, and that each system would be required to be physically separated. The letter also required submittal of a diagram and the names and addresses for all homeowners. The reclassification of this facility was discussed in a series of emails on June 29, 2009 among Department staff and the president of Sterling Woods. The steps that needed to be taken by Sterling Woods to separate the PWS system into two legal entities were discussed.
- 10. On September 11, 2009, Michael Ehlers, president of Sterling Woods, submitted information that proposed to split the facility into two new separate legal entities. The submittal listed the members of each proposed new system, including the members' addresses. No new well had been drilled yet. By a letter dated November 16, 2009, Bill Wyer, WSOS environmental specialist, forwarded comments to Mr. Ehlers concerning the information that had been provided.

- 11. On January 13, 2010, Bill Wyer, WSOS environmental specialist, sent an email to Mr. Ehlers, president of Sterling Woods, stating that the facility had gone 15 months without an MCL, the last occurring in October 2008. He inquired whether the facility had done any corrective actions that could account for the absence of positive samples. On January 19, 2010, Mr. Ehlers sent an email response to Mr. Wyer stating that no corrective actions had been taken and they felt the previous positives were "anomalous".
- 12. On February 23, 2010, the Department issued a revised permit to Sterling Woods. This revised permit included an agreement letter that the president of Sterling Woods was required to sign and return to the Department. The intent of the revised permit and agreement letter was to allow the facility to agree to routine coliform bacteria monitoring (5 samples per month) in lieu of the requirement to install disinfection for a period of six months. If there were positive samples during this time period, Sterling Woods would move to immediate chlorination. If there were no positive samples, the facility would revert back to reduced monitoring. On April 16, 2010, the Department received a signed letter with Mr. Ehlers' signature, indicating that Sterling Woods would accept the offer to conduct increased routine monitoring for a six month period in lieu of chlorination.
- 13. On April 21, 2010, Aaron Pickens, FO 6 Environmental Specialist, conducted a sanitary survey. It was noted during the survey that according to the operator, Sterling Woods intended to drill a second well and then deactivate as a PWS. On April 30, 2010, Mr. Wyer sent an email to Mr. Pickens stating that he had received a signed letter from Mr. Ehlers accepting the offer to conduct increased routine monitoring for six months in lieu of installing chlorination.
- 14. On June 15, 2010, the Department issued a non-acute coliform bacteria MCL violation for June 2010. Public notification was required for the violation.
- 15. On July 6, 2010, the Department issued Sterling Woods a revised permit. The revised permit included a new schedule for the installation of disinfection equipment.
- 16. On July 12, 2010, the Department issued Sterling Woods a non-acute coliform bacteria MCL violation for July 2010. Public notification was required for the violation.
- 17. On July 19, 2010, the Department sent Sterling Woods a letter stating that its source water sample ("triggered" well sample) came back fecal indicator positive. Tier 1 public notification was required and subsequent documentation from the facility stated that it was completed.
- 18. On August 23, 2010, the Department issued Sterling Woods a non-acute coliform bacteria MCL violation for August 2010. Sterling Woods was required to provide public notice for the violation.
- 19. On August 30, 2010, Mr. Ehlers sent a letter to the Department requesting an extension of the deadline to evaluate the sanitary integrity of the Sterling Woods well. He stated that Sterling Woods had been investigating potentially hooking up to Iowa American Water (IAW). On

September 7, 2010, the Department sent a response letter to Mr. Ehlers granting an extension of all permit requirements to September 30, 2010.

- 20. On September 23, 2010 the Department issued a non-acute coliform bacteria MCL violation for September 2010. Sterling Woods was required to provide public notice for the violation. On September 30, 2010, Sterling Woods submitted a construction permit application to the Department's Water Supply Engineering Section regarding the installation of chlorination equipment. This application was denied due to "the fact that a non-conforming buried pneumatic storage tank exists at your water system".
- 21. Sterling Woods has now connected all homeowners in Sterling Woods to the IAW PWS and is no longer using its well. Sterling Woods has closed the well by removing the pump and electrical supply to the well. Sterling Woods plugged the well with bentonite and removed the buried pressure tank and piping in spring 2011. This facility has been deactivated as a PWS by the Department.

IV. CONCLUSIONS OF LAW

- 1. Iowa Code section 455B.172 makes this Department the agency of the state to conduct the public water supply program. Iowa Code section 455B.171 defines a PWS as a system for the provision of piped water for human consumption, if the system has at least fifteen service connections or regularly serves at least twenty-five individuals. Iowa Code sections 455B.173(3), (5), and (6) authorize the Environmental Protection Commission (Commission) to promulgate rules relating to the operation of public water supply systems and to adopt drinking water standards to assure compliance with federal standards adopted pursuant to the federal Safe Drinking Water Act. The Commission has the authority to adopt rules relating to monitoring, record keeping, and reporting requirements for any public water supply. The Commission has adopted such rules at 567 IAC chapters 40-43.
- 2. Rule 567 IAC 40.2(455B), further defines public water supply by defining "community water system" as a PWS which has at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents, consistent with federal regulations. The PWS that served Sterling Woods was classified as a community water system.
- 3. Subrule 567 IAC 41.2(1)"c"(1)3 provides the requirements for sampling for coliform bacteria. For community systems this subrule provides in part:
- 3.... After June 29, 1994, the monitoring frequency for systems serving less than 4,101 persons shall be a minimum of five routine samples per month unless the department determines, after completing sanitary surveys (at intervals not to exceed five years), that the monitoring frequency may continue as listed below....

TOTAL COLIFORM MONITORING FREQUENCY FOR COMMUNITY WATER SYSTEMS AND NONCOMMUNITY (SCHOOL) WATER SYSTEMS

Population Served 25 to 1,000*

Minimum Number of Samples Per Month

*Includes public water supply systems which have at least 15 service connections, but serve fewer than 25 persons

Under the Department's rules a community water system is required to sample 5 times per month. Where satisfactory water quality is maintained, the frequency can be reduced to one sample per month. When positive results are obtained in a routine sample, additional follow-up sampling is required. Subrule 83.1(3) requires the samples to be analyzed at a certified laboratory. Subrule 42.4(1) requires that the analytical results be reported to the Department within ten days after the test. Subrule 42.5(1) requires a public water supply system to retain records of bacteria analyses of its water supply for a period of five years.

Subrule 41.2(1)"b" establishes the MCL for coliform bacteria. For a system that collects less than 40 samples per month, no more than one sample collected during a month may be total coliform-positive. In addition, any fecal coliform-positive repeat sample or *E. Coli*-positive repeat sample, or any total coliform-positive repeat sample following a fecal coliform-positive or *E. Coli*-positive routine sample constitutes a violation of the MCL for total coliforms and is considered an acute risk to health.

- 4. Subrule 43.2(2) requires that no person shall operate any public water supply system or part thereof without, or contrary to any condition of, an operation permit issued by the Director. Subrule 43.2(5)"a" states that operation permits may contain such conditions as are deemed necessary by the Director to ensure compliance with all applicable rules of the Department, to ensure that the public water supply system is properly maintained, to ensure that potential hazards to the water consumer are eliminated promptly, and to ensure that the requirements of the Safe Drinking Water Act are met. Subrule 43.2(5)"b" states that where one or more MCLs, treatment techniques, designated health advisories, or action levels cannot be met immediately, a compliance schedule for achieving compliance with standards may be made a condition of the permit.
- 5. Subrule 567 IAC 43.3(1) pertains to standards for public water supplies. This subrule provides as follows.
- 43.3(1) Standards for public water supplies. Any public water supply that does not meet the drinking water standards contained in 567—Chapters 41 and 43 shall make the alterations in accordance with the standards for construction contained in 43.3(2) necessary to comply with the drinking water standards unless the public water supply has been granted a variance from a maximum contaminant level or treatment technique as a provision of its operation permit pursuant to 43.2(455B), provided that the public water supply meets the schedule established pursuant to 43.2(455B). Any public water supply that, in the opinion of the director, contains a potential hazard shall make the alterations in accordance with the standards for construction contained in this rule necessary to eliminate or minimize that hazard. A system that is not

operating within the design standards may be required by the department via a compliance schedule to upgrade the deficient areas of the system before a construction permit will be issued for any work in the system that does not address the current deficiencies.

This subrule authorizes the Department to require a PWS to make alterations to its system to correct deficiencies or to connect to an alternate water source. This could include construction of a new well in order to meet drinking water standards or connection to an existing source of drinking water acceptable to the Department. The connection of Sterling Woods to the IAW PWS was an acceptable means of dealing with the non-acute coliform bacteria MCL violations incurred by Sterling Woods since 1996.

V. ORDER

THEREFORE, the Department orders and Sterling Woods agrees to comply with the following provision:

- 1. Sterling Woods agrees to pay an administrative penalty of \$3,000.00. The penalty is due to the Department within 30 days of receipt of the Order signed by both parties.
- 2. In lieu of payment of the full administrative penalty, Sterling Woods may elect to pay \$1,500.00 to the Department as an administrative penalty and \$1,500.00 toward a supplemental environmental project (SEP) to the Scott County Conservation Board. Sterling Woods is required to pay the \$1,500.00 administrative penalty to the Department within 30 days of receipt of the Order signed by both parties. Sterling Woods is required to provide documentation of payment of the SEP to Diana Hansen, Iowa Department of Natural Resources, within thirty days of receipt of the Order signed by both parties.

VI. PENALTY

Iowa Code section 455B.191 authorizes the assessment of civil penalties of up to \$5,000.00 per day of violation for the violations involved in this matter. Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000.00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties in 567 IAC chapter 10. Pursuant to this chapter, the Department has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an order with an administrative penalty. The administrative penalty assessed by this order is determined as follows:

a. <u>Economic Benefit</u>. Sterling Woods initially received an economic benefit by postponing necessary upgrades or connection to an alternate source of safe drinking water to correct the non-acute coliform bacteria MCL violations. Sterling Woods delayed installation of chlorination or connection to an alternate water source for several years.

The Department recognizes the fact that Sterling Woods is a non-profit organization. During the periods where there were repeated non-acute coliform bacteria MCL violations, Sterling Woods incurred the cost of additional testing and temporary chlorination. The Department additionally recognizes that there was a period between October 2008 and June 2010 where no violations occurred at this facility.

Prior to November 2008, the only feasible water source for Sterling Woods was the existing well system. In November 2008, the IAW PWS activated a water main along the road at the entrance of Sterling Woods. To remedy the bacteria non-compliance issues, Sterling Woods and its homeowners have incurred significant expenses in converting to an alternate water source. These expenses included legal services to negotiate a bill of sale of the distribution system to IAW, right of way surveying, cost of individual homeowners meters and the piping connection to IAW, cost of decommissioning the existing well system by removing the pump and associated piping/controls/electrical service, complete removal of the 1,500 gallon underground pressure tank, plugging the existing well and repairing landscaping. In view of the costs to the homeowners association in connecting to IAW, the economic benefit is set at \$1,000.00.

b. <u>Gravity of the Violation</u>. One of the factors to be considered in determining the gravity of a violation is the amount of penalty authorized by the Iowa Code for the type of violation. As indicated above, substantial civil penalties are authorized by statute. Despite the high penalties authorized, the Department has decided to handle the violations administratively at this time, as the most equitable and efficient means of resolving the matter. This supply failed to take necessary actions in a timely manner to prevent exposure of residents to water which potentially had disease bearing organisms.

Sterling Woods has pointed out that the facility serves only 15 residences with several of the homes below 2.5 persons daily occupancy. It maintains that due to this, there was minimal numeric exposure to the facility's water. The Department assesses the amount of \$1,000.00 for this factor.

c. <u>Culpability</u>. The Department's position was that Sterling Woods demonstrated negligence in the operation of this PWS in its delays in finding a resolution to the coliform bacteria MCL violations. Sterling Woods has a long history of requests to postpone or a complete disregard of plans to remediate the deficiencies of this PWS. The Department's WSOS staff demonstrated a great deal of flexibility and patience in staff attempts to achieve compliance. In the Department's opinion very little progress was made until the Department indicated that enforcement should be taken. This happened following the reoccurrence of bacteria MCL violations in 2010. At this time Sterling Woods was able to connect to IAW, due to the main that had been installed in November 2008 along the road at the entrance to Sterling Woods. The Department recognizes the responsiveness of the current Sterling Woods officers in remedying the non-compliance issues. The board that was elected in October 2010 completed all of the permitting, legal, and construction activities required to connect to the IAW in less than four months. Sterling Woods has now corrected its deficiencies by connecting to IAW as another acceptable source of drinking water, plugging the well, removing the pressure tank and piping, and deactivating as a PWS. The amount of \$1,000.00 is assessed for this factor.

VII. WAIVER OF APPEAL RIGHTS

Iowa Code section 455B.175, and 561 IAC 7.4(1), as adopted by reference by 567 IAC chapter 7, authorize a written notice of appeal to the Commission. This Order is entered into knowingly by and with the consent of Sterling Woods. By signature to this Order, all rights to appeal this Order are waived.

VIII. NONCOMPLIANCE

Compliance with Section V. of this Order constitutes full pertaining to the violations described in this Order. Failure to coin the imposition of administrative penalties pursuant to an administrative General to obtain injunctive relief and civil penalties 455B.191.	emply with this Order may result inistrative order or referral to the
KEVIN TAKACS, PRESIDENT STERLING WOODS HOMEOWNERS ASSOCATION, INC.	Dated this 10 Hday of
CHUCK GIPP DIRECTOR IOWA DEPARTMENT OF NATURAL RESOURCES	Dated this day of

Sterling Woods Homeowners Association, Inc.- Water Supply Facility No. 8209306, Becky Schwiete & Cecilia Naughton- Water Supply Operations Section, Aaron Pickens & Paul Brandt-Field Office No. 6, Diana Hansen-Legal Services Bureau, II.B.2.b, II.B.2.c.(1).

Copy to: Jay Sommers, Attorney at Law, 1111 East River Drive, Davenport, Iowa 52803